

Claim Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A method of performing server-side processing of postback input received from a client and associated with a client-side user interface element, the method comprising:

examining the postback input received from the client to determine a hierarchical identifier of a target server-side control object in a server-side control hierarchy;

identifying the target server-side control object in the server-side control hierarchy based on the hierarchical identifier of the target server-side control object

passing the postback input received from the client to the target server-side control object; and

processing the postback input received from the client and passed to the target server-side control object.

2. (original) The method of claim 1 wherein the processing operation comprises changing a property of the target server-side control object; and further comprising:

generating authoring language data from the target server-side control object based on the property to define the client-side user interface element for transmission to the client.

3. (canceled)

4. (previously presented) The method of claim 2 wherein the postback input is received in a current round trip session, and further comprising:

creating a plurality of server-side control objects in a server-side control hierarchy, responsive to receipt of the postback input for the current round trip session; and;

terminating the plurality of server-side control objects, prior to receipt of other postback input in a subsequent round trip session.

5. (original) The method of claim 2 further comprising:

searching for the target server-side control object in a server-side control hierarchy based on the identifier;

creating the target server-side control object in the server-side control hierarchy, if the target server-side control object is not found by the searching operation; and

terminating the server-side control hierarchy, after the operation of generating authoring language data.

6. (previously presented) The method of claim 1 wherein the hierarchical identifier has a hierarchical identifier structure indicating a plurality of levels in a server-side control hierarchy including a plurality of member server-side control objects, and the operation of identifying the target server-side control object comprises:

extracting a node level identifier from the hierarchical identifier;

passing the node level identifier to a member server-side control object corresponding to the node level identifier;

identifying the member server-side control object as the target server-side control object, if the node level identifier identifies a leaf node of the hierarchical identifier;

extracting a next node level identifier from the hierarchical identifier of the target server-side control object, if the node level identifier does not identify a leaf node of the hierarchical identifier, wherein the next node level identifier identifies a child server-side control object of the member server-side control object; and

performing recursively the passing and identifying operations and the operation of extracting a next node level identifier using the next node level identifier as the node level

identifier and the child server-side control object as the member server-side control object, if the node level identifier does not identify a leaf node of the hierarchical identifier.

7. (currently amended) The method of claim 1 wherein the operation of processing the postback input comprises:

storing a postback data value as a property of the target server-side control object.

8. (original) The method of claim 7 wherein the target server-side control object initially stores an old data value as a property, and the operation of storing a postback data value comprises:

associating the postback data value with the property;

indicating a data change associated with the target server-side control object, if the postback data value passed to the target server-side control object is different than the old data value of target server-side control object; and

replacing the old data value with the postback data value in the target server-side control object.

9. (original) The method of claim 8 further comprising:

raising a server-side data change event after the operation of replacing of the old data value, if a data change is indicated.

10. (currently amended) The method of claim 7 wherein the target server-side control object is one of a plurality of member server-side control objects in a server-side control object hierarchy, and the operation of storing a postback data value comprises:

storing postback data values for all of the member server-side control objects in the server side control object hierarchy; and

raising at least one server-side data change event after the operation of storing a postback data value for all member server-side control objects, if at least one data change is indicated.

11. (original) The method of claim 10 further comprising:

receiving the server-side data change event from the target server-side control object; and
invoking a function of a non-sure-interface server component, based on the server-side data change event.

12. (original) The method of claim 1 wherein the operation of processing the postback input comprises:

processing a postback event using the target server-side control object.

13. (original) The method of claim 12 wherein the operation of processing a postback event comprises:

extracting from the postback input a postback even argument associated with the identifier;

passing the postback event argument associated with the identifier to the target server-side control object; and

processing the postback event argument using the target server-side control object.

14. (canceled)

15. (canceled)

16. (previously presented) A computer data signal embodied in a carrier wave by a computing system and encoding a computer program for executing a computer process performing server-side processing of postback input received from a client and associated with a client-side user interface element, the computer process comprising:

examining the postback input received from the client to determine a hierarchical identifier of a target server-side control object in a server-side control hierarchy;

identifying the target server-side control object in the server-side control hierarchy based on the hierarchical identifier of the target server-side control object;

passing the postback input received from the client to the target server-side control object; and

processing the postback input received from the client and passed to the target server-side control object.

17. (previously presented) A computer program storage medium readable by a computer system and encoding a computer program for executing a computer process performing server-side processing of postback input received from a client and associated with a client-side user interface element, the computer process comprising:

examining the postback input received from the client to determine a hierarchical identifier of a target server-side control object in a server-side control hierarchy;

identifying the target server-side control object in the server-side control hierarchy based on the hierarchical identifier of the target server-side control object;

passing the postback input received from the client to the target server-side control object; and

processing the postback input received from the client and passed to the target server-side control object.

18. (canceled)

19. (previously presented) A computer program product for processing postback input received from a client and associated with a client-side user interface element, the computer process comprising:

receiving a hierarchical identifier associated with the target server-side control object;

creating a plurality of server-side control objects in a server-side control hierarchy, the server-side control hierarchy including a target server-side control object associated with the client-side user interface element;

identifying the target server-side control object within the server-side control hierarchy, based on the hierarchical identifier;

passing the postback input to the target server-side control object;

processing the postback input received by target server-side control object; and

generating authoring language data from the plurality of server-side control objects to define a web page for display on a client.

20. (previously presented) The computer program product of claim 19 wherein the computer process further comprises:

terminating the plurality of server side control objects, after the operation of generating authoring language data.

21-26 (canceled)

27. (previously presented) A method comprising:

receiving at a server input data from a client, the input data being associated with an individual client-side user interface element on the client;

generating a hierarchy of server-side control objects on the server, each server-side control object corresponding to a client-side user interface element on the client;

identifying, using a hierarchical identifier received from the client, a server-side control object in the hierarchy to which the individual client-side user interface element corresponds; and

processing the input data using the identified server-side control object.

28. (previously presented) The method of claim 27 wherein the processing operation comprises:

setting a property value of the identified server-side control object based on the input data.

29. (previously presented) The method of claim 27 wherein the processing operation comprises:

raising an event in the identified server-side control object based on the input data.

30. (previously presented) The method of claim 27 further comprising:

generating authoring language data from a plurality of server-side control objects at a server to define a page for display on the client, the page including the individual client-side user interface element.

31. (previously presented) The method of claim 27 further comprising:

generating authoring language data from a plurality of server-side control objects at a server to define a page for display on the client, the authoring language data including a script that is tagged to be executed by the server to process input data received from the client.

32. (previously presented) A computer program product embodied in a computer readable medium for executing a computer process, the computer process comprising:

receiving at a server input data from a client, the input data being associated with an individual client-side user interface element on the client;

generating a hierarchy of server-side control objects on the server, each server-side control object corresponding to a client-side user interface element on the client;

identifying, using a hierarchical identifier received from the client, a server-side control object in the hierarchy to which the individual client-side user interface element corresponds; and

processing the input data using the identified server-side control object.

33. (previously presented) The computer program product of claim 32 wherein the processing operation comprises:

setting a property value of the identified server-side control object based on the input data.

34. (previously presented) The computer program product of claim 32 wherein the processing operation comprises:

raising an event in the identified server-side control object based on the input data.

35. (previously presented) The computer program product of claim 32 wherein the computer process further comprises:

generating authoring language data from a plurality of server-side control objects at a server to define a page for display on the client, the page including the individual client-side user interface element.

36. (previously presented) The computer program product of claim 32 wherein the computer process further comprises:

generating authoring language data from a plurality of server-side control objects at a server to define a page for display on the client, the authoring language data including a script that is tagged to be executed by the server to process input data received from the client.

37. (cancelled)